

1. An endoscopic device for use at a site within a body, the endoscopic device comprising:

an inner portion defining:

an operative channel providing a path for fluid to or from the body site; and

5 an optical channel; and

a sheath surrounding the inner portion to define a pressure-sensing channel and a fluid channel providing a path for fluid to or from the body site, the pressure-sensing channel and the fluid channel being defined between the sheath and the inner portion,

10 wherein the pressure-sensing channel is configured to communicate with a pressure sensor.

2. The device of claim 1 wherein the operative channel provides an inflow path for fluid from a fluid source to the body site.

15 3. The device of claim 2 wherein the fluid channel provides an outflow path for fluid from the body site.

4. The device of claim 1 wherein the operative channel is enclosed within the inner portion and is configured to receive an operative device.

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5. The device of claim 1 wherein the inner portion includes a first cylindrical inner wall that defines the operative channel.

25 6. The device of claim 5 wherein the inner portion includes a second cylindrical inner wall that defines the optical channel and the optical channel is enclosed within the inner portion to provide an opening for housing an optical device.

7. The device of claim 1 wherein the optical channel is radially symmetric.

30 8. The device of claim 1 wherein the pressure-sensing channel is spatially segregated from the optical channel.

9. The device of claim 1 wherein the inner portion and the sheath are integral.

10. The device of claim 1 wherein the inner portion and the sheath are separate pieces that interfit.

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11. The device of claim 1 wherein an element of the inner portion aligns with an element of the sheath.

12. The device of claim 11 wherein the elements are configured to align the inner portion with the sheath.

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13. The device of claim 1 wherein the sheath defines an opening extending from the fluid channel to provide a fluid path to or from the fluid channel through the opening of the sheath.

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14. The device of claim 1 wherein the sheath contacts the inner portion at a distal end of the inner portion.

15. The device of claim 1 wherein a distal end of the sheath is flush with a distal end of the inner portion.

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16. The device of claim 1 wherein the inner portion includes a circular rim having an outer surface that contacts the inner surface of the sheath at a distal end of the inner portion.

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17. The device of claim 1 wherein the inner portion includes an outer region having a first cylindrical portion with a first outer diameter and a second rim portion attached to the first cylindrical portion and having a second outer diameter larger than the first outer diameter.

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18. The device of claim 17 wherein the fluid channel is bounded between the first cylindrical portion and the sheath.

19. The device of claim 1 wherein the pressure-sensing channel is spatially segregated from the fluid channel.

5 20. The device of claim 1 wherein the pressure-sensing channel is spatially segregated from the operative channel.

21. The device of claim 1 wherein the operative channel is radially symmetric.

10 22. The device of claim 1 wherein the operative channel provides an outflow path for fluid from the body site.

23. The device of claim 22 wherein the fluid channel provides an inflow path for fluid from a fluid source to the body site.

15 24. The device of claim 1 further comprising a pressure-sensing port that maintains coupling between the pressure sensor and the pressure-sensing channel as the pressure-sensing port is rotated relative to the sheath and about a longitudinal axis of the sheath.

20 25. The device of claim 1 further comprising a fluid port that maintains coupling to the fluid channel of the sheath as the fluid port is rotated relative to the sheath and about a longitudinal axis of the sheath.

25 26. The device of claim 1 further comprising a hub surrounding and sealing a proximal end of the sheath from external fluids, the hub including a pressure-sensing port that couples the pressure sensor to the pressure-sensing channel.

30 27. A method of performing a surgical procedure at a body site, the method comprising:

connecting a fluid supply to an endoscopic device that defines a pressure-sensing channel between a sheath and an inner portion, a fluid flow path between the sheath and the inner portion, and a fluid flow path within the inner portion;

coupling a pressure sensor to the pressure-sensing channel;

5 inserting the endoscopic device into the body site;

inserting an operative device into an operative channel defined by the inner portion;

connecting a light source to an optical channel defined by the inner portion and housing an optical device;

10 irrigating fluid from the fluid supply to the body site through one of the fluid flow paths;

removing fluid from the body site through the other of the fluid flow paths; and monitoring pressure that is sensed at the pressure sensor.

15 28. An endoscopic device for use at a site within a body, the endoscopic device comprising:

a continuous flow endoscope defining:

an operative channel defining an inflow path for fluid to the body site and configured to receive an operative device,

an optical channel configured to house an optical device,

20 an outflow path for fluid from the body site, and

a channel for sensing pressure.

29. An endoscopic device for use at a site within a body, the endoscopic device comprising:

25 an inner portion defining an operative channel enclosed within the inner portion and providing a path for fluid to and from the body site, the operative channel being configured to receive the operative device;

30 a sheath surrounding the inner portion to define a pressure-sensing channel and a fluid channel providing a path for fluid to or from the body site, the pressure-sensing channel and the fluid channel being defined between the sheath and the inner portion, the pressure-sensing channel being configured to communicate with a pressure sensor; and

a pressure-sensing port that maintains coupling between the pressure sensor and the pressure-sensing channel as the pressure-sensing port is rotated relative to the sheath and about a longitudinal axis of the sheath.

5           30.     An endoscopic device for use at a site within a body, the endoscopic device comprising:

          an inner portion defining an operative channel enclosed within the inner portion and providing a path for fluid to or from the body site, the inner portion including an alignment element; and

10           a sheath surrounding the inner portion to define a pressure-sensing channel and a fluid channel providing a path for fluid to or from the body site, the pressure-sensing channel and the fluid channel being defined between the sheath and the inner portion, the sheath including an alignment element that aligns with the alignment element of the inner portion;

          wherein the pressure-sensing channel is configured to communicate with a pressure  
15     sensor.